



OIL ANALYSIS REPORT

WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL

Area
KEMP QUARRIES / BCS - GRAVETTE [67745]

Machine Id
WL124

Component
Diesel Engine

Fluid
PETRO CANADA DURON SHP 15W40 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor. (Customer Sample Comment: Pm3)

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PCA0069785	PCA0086993	PCA0086295
Sample Date		Client Info		08 Feb 2024	12 Oct 2023	06 Jul 2023
Machine Age	hrs	Client Info		37365	37365	36752
Oil Age	hrs	Client Info		37365	37365	36752
Filter Age	hrs	Client Info		0	0	0
Oil Changed		Client Info		Changed	Changed	Changed
Filter Changed		Client Info		Changed	Changed	Changed
Sample Status				NORMAL	NORMAL	NORMAL

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185m	>100	22	25	14
Chromium	ppm	ASTM D5185m	>20	<1	<1	<1
Nickel	ppm	ASTM D5185m	>4	<1	<1	<1
Titanium	ppm	ASTM D5185m		0	0	0
Silver	ppm	ASTM D5185m	>3	0	0	0
Aluminum	ppm	ASTM D5185m	>20	3	1	2
Lead	ppm	ASTM D5185m	>40	3	2	<1
Copper	ppm	ASTM D5185m	>330	6	6	8
Tin	ppm	ASTM D5185m	>15	<1	0	1
Vanadium	ppm	ASTM D5185m		<1	0	0
White Metal	scalar	*Visual	NONE	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE	NONE

CONTAMINATION

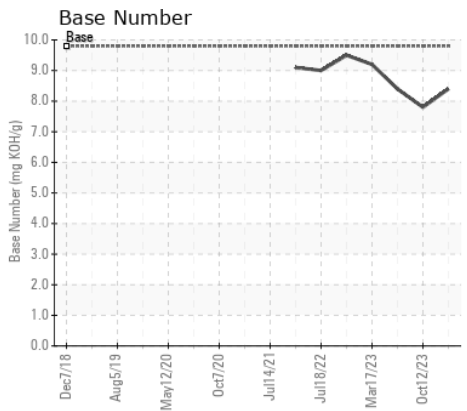
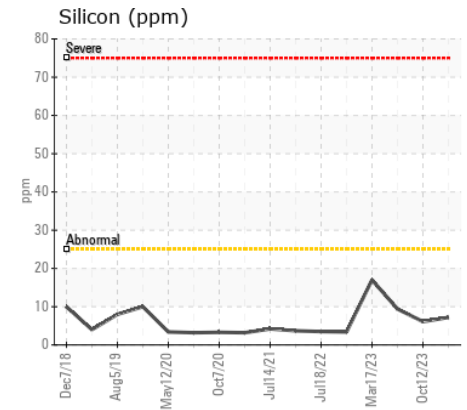
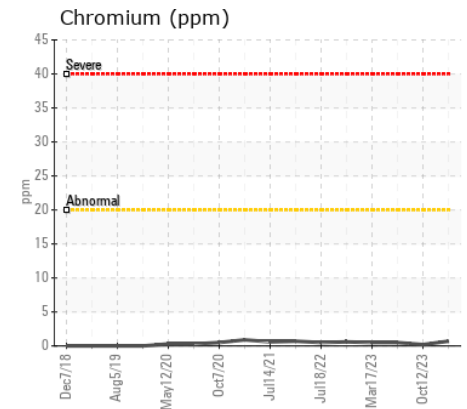
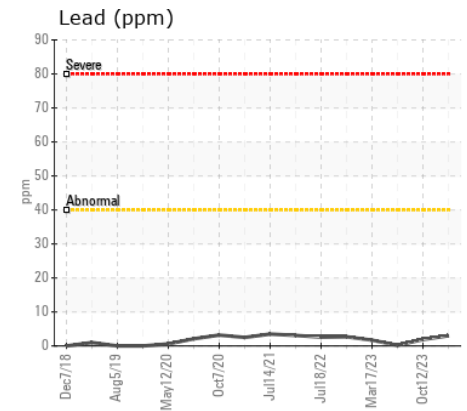
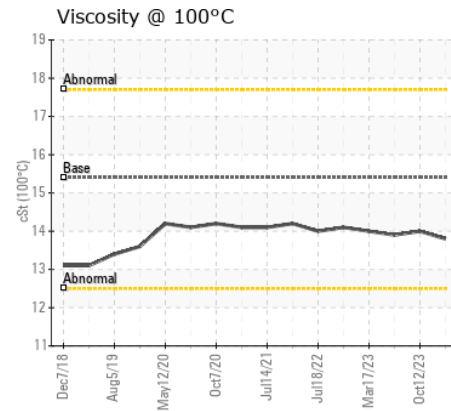
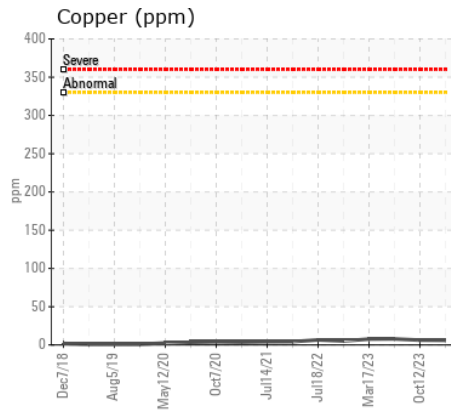
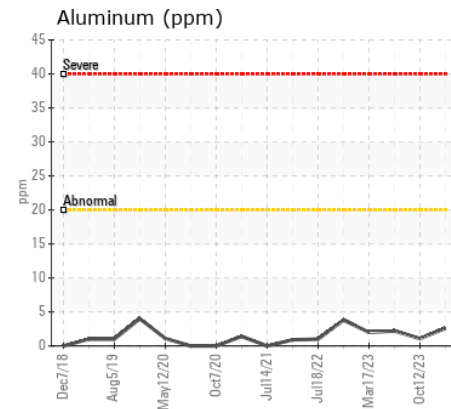
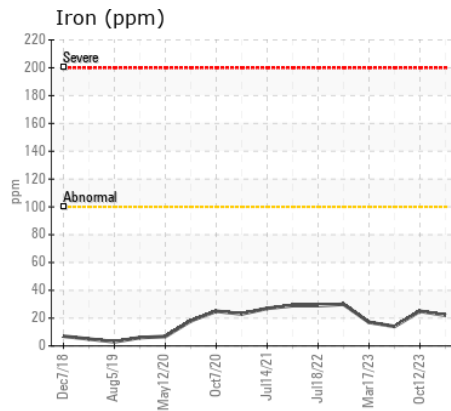
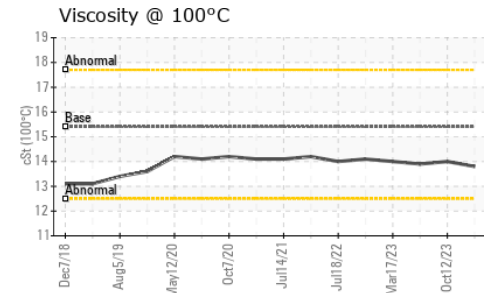
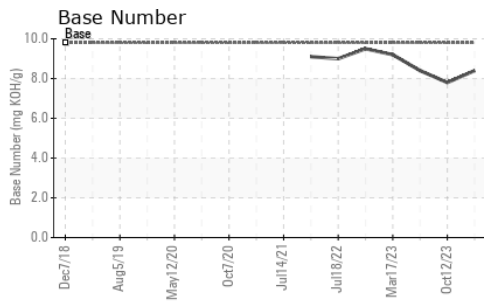
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185m	>25	7	6	9
Potassium	ppm	ASTM D5185m	>20	2	3	1
Fuel		WC Method	>5	<1.0	<1.0	<1.0
Water		WC Method	>0.2	NEG	NEG	NEG
Glycol		WC Method		NEG	NEG	NEG
Soot %	%	*ASTM D7844	>3	0.9	1.2	0.6
Nitration	Abs/cm	*ASTM D7624	>20	7.5	7.3	6.5
Sulfation	Abs/.1mm	*ASTM D7415	>30	19.7	19.7	19.4
Silt	scalar	*Visual	NONE	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.2	NEG	NEG	NEG

FLUID CONDITION

The BN result indicates that there is suitable alkalinity remaining in the oil. The condition of the oil is suitable for further service.

Sodium	ppm	ASTM D5185m		2	3	2
Boron	ppm	ASTM D5185m	0	0	<1	<1
Barium	ppm	ASTM D5185m	0	0	0	0
Molybdenum	ppm	ASTM D5185m	60	58	57	56
Manganese	ppm	ASTM D5185m	0	<1	0	<1
Magnesium	ppm	ASTM D5185m	1010	973	917	967
Calcium	ppm	ASTM D5185m	1070	1278	1106	1122
Phosphorus	ppm	ASTM D5185m	1150	1112	1009	1047
Zinc	ppm	ASTM D5185m	1270	1324	1265	1306
Sulfur	ppm	ASTM D5185m	2060	3134	3015	3782
Oxidation	Abs/.1mm	*ASTM D7414	>25	14.0	13.5	14.9
Base Number (BN)	mg KOH/g	ASTM D2896	9.8	8.4	7.8	8.4
Visc @ 100°C	cSt	ASTM D445	15.4	13.8	14.0	13.9



Certificate L2367

Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513

Sample No. : PCA0069785

Lab Number : 06100660

Unique Number : 10898890

Test Package : MOB 1 (Additional Tests: TBN)

Received : 26 Feb 2024

Tested : 27 Feb 2024

Diagnosed : 28 Feb 2024 - Sean Felton

Kemp Quarries - Benton County Stone - Gravette

15100 N Hwy 59

Sulphur Springs, AR

US 72768

Contact:

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T:

F:

To discuss this sample report, contact Customer Service at 1-800-237-1369.

* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)